

Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1.(Previously Presented) A high-pressure discharge lamp comprising:
a discharge tube including electrodes;
electrode lead-throughs connected to the electrodes;
a reflector; and

a cooling device, wherein the cooling device comprises at least one pair of nozzles which guide a cooling gas flow onto portions of the electrode lead-throughs of the discharge tube so that the portions are more strongly cooled than further portions of the electrode lead-throughs.

2.(Previously Presented) The discharge lamp as claimed in claim 1, wherein the pair of nozzles comprises two nozzles which are passed through the reflector at a mutual distance of less than 2 cm.

3.(Previously Presented) The discharge lamp as claimed in claim 1, wherein one or several nozzles are arranged in front of the reflector.

4.(Previously Presented) The discharge lamp as claimed in claim 1, wherein one or several nozzles are arranged in a neck of the reflector.

5.(Previously Presented) The discharge lamp as claimed in claim 1, wherein the discharge tube is surrounded by two sleeve sections into which cooling gas flows can be introduced from mutually opposed directions.

6.(Previously Presented) The discharge lamp as claimed in claim 5, wherein the sleeve sections have a diameter which is 0.5 to 4 mm greater than that of the discharge tube in the regions of the electrode lead-throughs.

7.(Currently Amended) The discharge lamp as claimed in claim 1, wherein the cooling power is controlled by a control unit so as to observe given operational parameters.

8.(Previously Presented) The discharge lamp as claimed in claim 1, wherein the nozzles have a diameter of approximately 0.5 to 2 mm.

9.(Previously Presented) The discharge lamp as claimed in claim 1, further comprising a gas pressure source capable of generating a gas pressure of several hundreds of mbar in the nozzles.

10.(Previously Presented) A projection system with the high-pressure discharge lamp as claimed in claim 1.

11.(Previously Presented) The discharge lamp of claim 1, wherein the at least one pair of nozzles directs the cooling gas flow substantially perpendicular to the portions without directing the cooling gas flow toward the further portions.

12.(Previously Presented) The discharge lamp of claim 1, wherein the at least one pair of nozzles directs the cooling gas flow towards the portions in a direction forming an acute angle with the electrode lead-throughs, without directing the cooling gas flow toward the further portions.

13.(Previously Presented) The discharge lamp of claim 1, wherein the at least one pair of nozzles directs the cooling gas flow in a direction forming an acute angle with the electrode lead-throughs.

14.(Previously Presented) The discharge lamp of claim 1, wherein the at least one pair of nozzles is located on one side of the reflector to guide the cooling gas flow onto the portions of the electrode lead-throughs without directing the cooling gas flow toward the further portions.

15.(Previously Presented) The discharge lamp of claim 1, wherein the at least one pair of nozzles is located on one side of the reflector to guide the cooling gas flow onto the portions of the electrode lead-throughs.